

What is Claimed is:

1. A centrifuge labware device comprising:
 - (a) a container having very high axial strength, the container comprising a bottom wall and one or more substantially vertical sidewalls, the bottom wall and the one or more side walls cooperating to define an interior chamber having an interior chamber cross-sectional area, the container having a top opening with a first transverse axis and a second transverse axis substantially perpendicular to the first transverse axis, each transverse axis being at least about 9 cm in length, the top opening defining a top opening open area which is at least about 90% of the interior chamber cross-sectional area; and
 - (b) a removable non-threaded lid having an exterior surface, an interior surface and a very high axial strength, the lid being sized and dimensioned to cover the top opening so as to seal the interior chamber.
2. The centrifuge labware device of claim 1 wherein the bottom wall of the container has an interior side, wherein the container has sufficient strength to withstand the force of 5000 x g applied to the interior side of the bottom wall and wherein the lid has sufficient strength to withstand the force of 5000 x g applied to the exterior side of the lid.
3. The centrifuge labware device of claim 1 further comprising a carrying handle.
4. The centrifuge labware device of claim 1 further comprising a hinged clip for securing the lid to the container.
5. The centrifuge labware device of claim 4 wherein the hinged clip is recessed within one or more grooves disposed in the exterior surface of the lid.

6. The centrifuge labware device of claim 1 further comprising a pouring spout in the lid, the pouring spout having a removable self-sealing pouring spout cover.

7. The centrifuge labware device of claim 6 wherein the pouring spout has a sharp forward edge so that the decanting of liquid from the container through the pouring spout is substantially drip-free.

8. The centrifuge labware device of claim 1 wherein the interior surface of the lid has a circumferential horizontal lid flange with a width of at least about 3 mm.

9. The centrifuge labware of claim 8 wherein the lid further comprises a pouring spout and wherein the pouring spout has a downwardly directed portion which extends downwardly below the circumferential horizontal lid flange.

10. The centrifuge labware device of claim 8 wherein the interior surface of the lid further comprises a circumferential vertical lid flange disposed interior to the circumferential horizontal lid flange, the vertical lid flange being disposed downwardly below the horizontal lid flange by a distance of at least about 3 mm.

11. The centrifuge labware device of claim 10 wherein the vertical lid flange is sized and dimensioned to be spaced-apart from the circumferential rim of the container by at least about 1 mm.

12. The centrifuge labware device of claim 8 wherein the top opening of the container is defined by a circumferential rim which matches with the circumferential horizontal lid flange and wherein a gasket is disposed between the circumferential rim and the circumferential horizontal lid flange.

13. The centrifuge labware device of claim 12 wherein the gasket has an upper surface which defines a tortuous path.

14. The centrifuge labware of claim 12 wherein the first transverse axis is longer than the second transverse axis and wherein the side walls of the container along the transverse axis are higher in elevation than the side walls along the first transverse axis.

15. The centrifuge labware device of claim 1 further comprising a liner disposed within the container, the liner being sized and dimensioned to closely fit against the walls of the container.

16. The centrifuge labware device of claim 15 wherein the interior surface of the lid has a circumferential lid flange, wherein the top opening of the container is defined by a circumferential rim which corresponds to matches the circumferential horizontal lid flange, wherein the liner has one or more vertical side walls which terminate in an outwardly directed circumferential horizontal liner flange and wherein the circumferential horizontal liner flange is disposed between the circumferential rim of the container and the circumferential horizontal lid flange.

17. The centrifuge labware device of claim 1 wherein the one or more side walls of the container have an exterior surface and an interior surface, the interior surface of the one or more side walls comprising a pair of opposed first structural support slots.

18. The centrifuge labware device of claim 17 further comprising a planar horizontal support member disposed within the first structural support slots.

19. The centrifuge labware device of claim 18 further comprising a pair of second structural support slots disposed on the interior surface of the container, spaced apart from the first structural support slots.

20. The centrifuge labware device of claim 1 wherein the interior surface of the bottom wall is bowl-shaped and wherein the transition of the bottom wall to the one or more side walls is smooth and defines no corners or edges.

5 21. The centrifuge labware device of claim 1 further comprising an air vent filter disposed within the lid.

22. The centrifuge labware device of claim 1 wherein the one or more side walls are translucent or transparent.

10 23. The centrifuge labware device of claim 1 wherein the centrifuge labware device is disposed within a centrifuge.

24. A centrifuge labware device comprising:

15 (a) a container having very high axial strength, the container comprising a bottom wall and one or more substantially vertical sidewalls, the bottom wall and the one or more side walls cooperating to define an interior chamber, the uppermost portions of the side walls terminating in a circumferential rim which defines a top opening for the container, the container further having a first transverse axis and a second transverse axis substantially perpendicular to the first transverse axis, each transverse axis being at least about 9 cm in length;

20 (b) a removable non-threaded lid having an exterior surface, an interior surface and a very high axial strength, the lid being sized and dimensioned to cover the top opening so as to seal the interior chamber, the lid comprising a pouring spout having a removable self-sealing cover, a circumferential horizontal lid flange which matches with the circumferential rim of the container and a circumferential vertical lid flange disposed interior to the circumferential horizontal lid flange, the vertical lid flange being disposed downwardly below the horizontal lid flange by a distance of at least about 3 mm; and

25 (c) a gasket disposed between the circumferential rim and the circumferential horizontal lid flange.